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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,846	10/31/2003	Farid Bruce Khalili	VER2226-005	8064
8698 7590 10/20/2008 STANDLEY LAW GROUP LLP 495 METRO PLACE SOUTH SUITE 210 DUBLIN, OH 43017				
EXAMINER				
PELLEGRINO, BRIAN E				
ART UNIT		PAPER NUMBER		
3738				
MAIL DATE		DELIVERY MODE		
10/20/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/696,846

**Applicant(s)**

KHALILI, FARID BRUCE

**Examiner**

Brian E. Pellegrino

**Art Unit**

3738

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-5, 8-10 and 17-19 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2, 3, 8-10 and 17-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's AF submission filed on 6/24/08 has now been entered.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18,19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 18 recites the limitation "the ..... inverted frustocone" in line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2,3,8,9,17,18 are rejected as best understood under 35 U.S.C. 103(a) as being unpatentable over Mazda (WO 94/04100) in view of Serhan et al. (6669732). Mazda shows (Fig. 5) a spinal implant with a first base component **25**, a second base component **26**, and a middle component **22** having a convex side **9**. The first base component having a second side that comprises a concave portion **12** with a constant radius to engage the convex surface of the middle component. Regarding claim 8, it can be seen the middle component is removably or slidably received in slot **28** such that the convex portion extends above the "generally" flat portion of the inner second side of the second base component. It can be construed that grooves in the plates for the screw in teeth lie below the flat surface and surround the convex component. As seen in Fig. 5, there are a plurality of sharpened teeth **17** and are positioned on each side of the top and bottom components for **engaging** vertebrae. With respect to claim 9, it can be seen in Fig. 2 of Mazda that the center of the middle component is closer to one edge than the other. However, Mazda fails to disclose the surface for engaging vertebrae includes a raised portion with angled sidewalls. Serhan et al. teach (Figs. 2,5) that the vertebral engaging surface of the implant includes a raised portion **62**, **162** on the top and bottom surfaces of the base components of a spinal implant and has angled sidewalls **70**, **170**. Serhan also teaches that the outer surface of the implant and the raised portion (Fig. 4) has a coating to cooperate with bone ingrowth, col. 5, lines 10-49. It would have been

obvious to one of ordinary skill in the art to incorporate the raised portion as taught by Serhan et al. with the spinal implant of Mazda since it would enhance the securing and promote integration with the vertebrae. Regarding claim 18, Fig. 6 of Mazda show the teeth are positioned near the periphery and the raised portion on Serhan's device is positioned in the central area.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mazda (WO 94/04100) in view of Serhan et al. '732 as applied to claim 17 above, and further in view of Khandkar et al. (2004/133281). Mazda is explained above. However, Mazda fails to disclose the middle component varies in height from posterior to anterior edges. Khandkar et al. teach (Fig. 8) that middle component **42** varies in height from posterior to anterior edges to provide limited amount of axial rotation and translation, Paragraph 73. It would have been obvious to one of ordinary skill in the art to modify the middle component to be varied in height as taught by Khandkar et al. in the spinal implant of Mazda modified with Serhan et al. such that it limits movement in a patient that can only have limited motion.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mazda in view of Serhan et al. '732 as applied to claim 18 above, and further in view of Alfaro et al. (2001/32017). Mazda as modified by Serhan et al. is explained supra. However, Mazda in view of Serhan et al. fail to disclose a pair of concentric raised circular structures. Alfaro et al. teach (Figs. 1,6A,11) that bone engaging structure centrally located can be concentric and circular since it is stepped to match contour of vertebral endplates, paragraph 11. It would have been obvious to one of ordinary skill in the art

to incorporate a stepped concentric central section as taught by Alfaro et al. with the spinal implant of Mazda as modified by Serhan et al. such that it conforms to the vertebral bodies the prosthesis is implanted therein.

***Response to Arguments***

Applicant's arguments with respect to claim 17 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian E. Pellegrino whose telephone number is 571-272-4756. The examiner can normally be reached on M- F (9am-5:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on 571-272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TC 3700  
/Brian E Pellegrino/  
Primary Examiner, Art Unit 3738